

23390 EXPEDITED HANDLING BOX AF

IN THE U.S. PATENT AND TRADEMARK OFFICE

Inventor Hilde HARDTDEGEN et al
Patent App. 10/550,365
Filed 14 June 2006 Conf. No. 7978
For MOCVD GAS-PHASE DEPOSITION APPARATUS
Art Unit 1792 Examiner Smith, F
Hon. Commissioner of Patents
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FIFTH AMENDMENT - AFTER FINAL ACTION

This is in response to the Office Action mailed
10 December 2008.

Enclosed herewith is a PTO-1449 listing the patent equivalents of the published applications cited as new references in the last Office Action.

Previously cited EP '215 of Shibata merely shows a plurality of inlets, but no way of flexibly switching them between different gas supplies or other equipment. There is in fact no way to switch the supplies. With Shibata the object is to obtain parasitic deposition on reactor parts. The object of the instant

invention is the opposite: to reduce parasitic deposition and therefore flexibly switch the gas lines.

In publication 2002/0043215 of Yoshioka (US 7,163,197) there are various valves for the vaporization of liquid source materials in order to inject the vaporized materials into the reactor. These valves are also in use in the reactor of the instant invention, but upstream of the chamber. They have nothing to do with which compartment of the reactor the gas lines are connected to. It is not the use of the valves as such, but the location of the valves and the supplies that is of significance.

US 2002/0108714 of Doering (US 6,818,067) merely shows the use of quick-connect couplings on a deposition chamber. Arguably, this equipment could be used to connect different compartments of the reactor to different supplies, but there is no suggestion to do so, so that once again the rejection is faulty. The prior art thus shows that equipment components can be connected or disconnected via quick-connect fittings such as flanges and fast switching valves. Doering also teaches that gases can be switched between the reactor and the exhaust gas lines. But no-one suggests that gas inlets connected to different gas supplies can be flexibly switched between different compartments in the reactor.

Thus the rejection is merely showing various systems that could maybe do what the invention claims - flexibly connect the various compartments of the reactor to different equipment or supplies - but does not teach doing so. Thus the claims are allowable under §103 over the cited art. Notice to that effect is earnestly solicited.

If only minor problems that could be corrected by means of a telephone conference stand in the way of allowance of this case, the examiner is invited to call the undersigned to make the necessary corrections.

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Enclosure:

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